REMARKS

Claims 1-5, 8-23, 25-33, and 57 and new claims 58—65 are pending in this application.

I. Rejections under 35 USC § 102(a)

Claims 1-5, 7-23, 25-33, 57 are rejected under 35 USC § 102(a), as being anticipated by an article entitled "Towards Single Molecule Manipulation with Dielectrophoresis Using Nanoelectrodes," which was authored by the inventors of the subject application Lifeng Zheng, Peter J. Burke, and ShengDong Li, along with a fourth author James P. Brody (Zheng).

According to IEEE Xplore Digital Library, the Zheng article was first published in 2003 Third IEEE Conference on Nanotechnology, 2003. IEEE-NANO, on August 12—14, 2003. A print out of a record from http://ieeexplore.ieee.org confirming this publication date is attached Exhibit A.

The subject application claims priority to a provisional application No. 60/450,985 filed on February 27, 2003, which is before the August 2003 publication date of Zheng. Therefore, Zheng cannot be considered as prior art under 35 USC § 102(a), and Applicants respectfully request that the Examiner withdraw its rejection of Claims 1-5, 8-23, 25-33, 57 based on Zheng.

II. Allowable Subject Matter

Claims 32-33 and 57 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 32 has been re-written as new independent claim 58 including all of the limitations of Claim 32's base claim, claim 20, and intervening claims, claims 31, 27, 22, and 21. Claims 33, 23, and 26—30 have been re-written as claims 59—64 depending from new claim 58. Claim 57 has been re-written as new independent claim 65 including all of the

limitations of Claim 57's base claim, claim 20, and intervening claims, claims 30, 27, 22, and 21.

III. Conclusion

Prompt and favorable action on the merits of the claims is earnestly solicited. Should the Examiner have any questions or comments, the undersigned can be reached at (949) 567-6700.

The Commissioner is authorized to charge any fee which may be required in connection with this Amendment to deposit account No. 15-0665.

Respectfully submitted,
ORRICK, HERRINGTON & SUTCLIFFE LLP

/Kenneth S. Roberts/

Dated: November 16, 2009

By: _____
Kenneth S. Roberts
Reg. No. 38,283

Orrick, Herrington & Sutcliffe LLP
4 Park Plaza, Suite 1600
Irvine, CA 92614-2558
Tel. 949-567-6700
Fax: 949-567-6710

EXHIBIT A

Towards single molecule manipulation with dielectrophoresi nanoelectrodes

Lifeng Zheng Shengdong Li Burke, P.J. Brody, J.P.
Electr. Eng. & Comput. Sci., California Univ., Irvine, CA, USA;

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Abstract
We present measurements of the scaling of the dielectrophoresis force with electrode size and order to determine the ultimate size limits for dielectrophoresis at the nanoscale. To demonstra of nano-manipulation we present studies on the dielectrophoretic manipulation of DNA with mic electrodes using RF electric fields. We find that DNA undergoes positive dielectrophoresis (i.e. attracted to high electric field regions) at frequencies between 500 kHz and 1 MHz. We presen manipulation array platform which demonstrates the scalability of these concepts for massively economic manipulation at the molecular scale. Finally, based on these measurements, we pres a nanomotor using nanotube electrodes. Applications in molecular electronics and molecular m discussed.

Index Terms
Available to subscribers and IEEE members.

References
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Citing Documents
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